

**Abstract Type : Poster**

**Abstract Submission No. : PO-1570**

## **Association of Metabolic Component and Chronic Kidney Disease in Hypertension**

**Piyanan Temprom**, Palida Nongnuan, Jom Suwanno

Department of Master Of Nursing Science Program In Adult And Gerontological Nursing, Nursing, Walailak University, Thailand

### **Objectives:**

Hypertension is a highly prevalent disease and the leading cause of chronic kidney disease (CKD). Metabolic syndrome (MetS) could also be the risk factor for CKD. All Metabolic Component have individually been associated with the incidence and progression of CKD. There are a few studies in patient with hypertension. We examined the association of metabolic component and CKD in Hypertension.

### **Methods:**

All patients with Hypertension (N=782) attended 4 primary care settings in southern Thailand, 342 cases were eligible. Metabolic Component included high blood pressure (HBP), high plasma glucose (HPG), waist circumference (WC), high triglyceride (HTG) and low high-density lipoprotein cholesterol (LHDL) was defined according to NCEP-ATP III criteria. CKD was defined as estimated glomerular filtration rate (eGFR) < 60ml/min/1.73m<sup>2</sup> on KDIGO 2012. Data were analyzed using Chi-square, odds ratio (95%CI).

### **Results:**

Prevalence of CKD was 27.1%. Prevalence of metabolic component in CKD was WC 22.5%, HPG 23.6%, HTG 25.9%, HBP 27.2% and LHDL 28.6% Compared with non-CKD, elevated waist circumference (OR=2.02, 95% CI 1.23–3.30, p=0.005) were associated with the prevalence of CKD in hypertension. Other metabolic component, HPG (OR=1.42, 95% CI 0.88-2.30, p=0.154), HTG (OR=1.13, 95% CI 0.70-1.83, p=0.628), and LHDL (OR=0.662, 95% CI 0.55-1.46, p=0.662) were not significantly differences.

### **Conclusions:**

Our study has shown that elevated waist circumference in hypertension may increase risk of CKD. Waist circumference should also be concerned during the risk management of hypertension.